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Abstract of the Disclosure

A method is disclosed for transmitting data packets in wide area networks (WAN) by way of a synchronous digital data transmission network (SDH), wherein the data packets are packed into synchronous transport modules (STM-N) and are transmitted by way of virtual connections formed by subunits of synchronous transport modules of the same size. The virtual connections are entered into an address table and an evaluation of the target address of the data packets takes place in one of the network elements of the synchronous digital data transmission network. On the basis of the address table and the target address, at least for a part of the data packets, a decision is made by at least one of the network elements of the synchronous digital data transmission network as to which one of the virtual connections is used to transmit this data packet. Furthermore, a network element is disclosed, which operates in accordance with the transmission method.